

CLAIMS

1. An alkenyl ether compound comprising an aromatic carboxylic acid having a fluorine atom or an aromatic carboxylic acid ester having a fluorine atom.

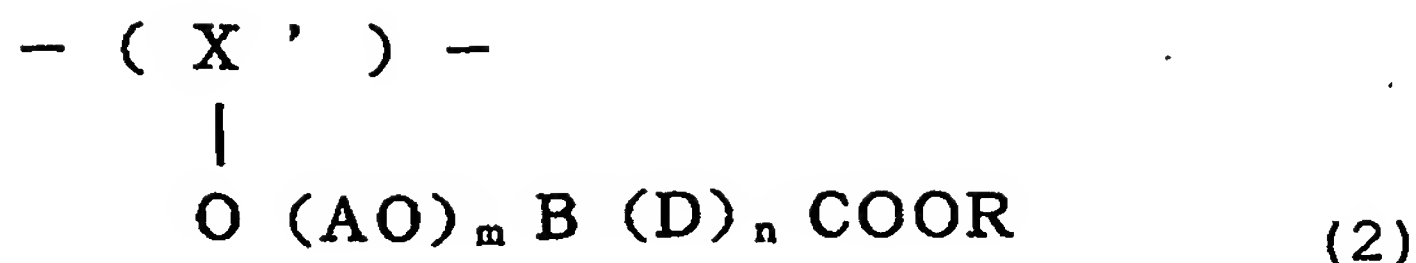
5 2. The alkenyl ether compound according to claim 1, which is represented by the general formula (1):



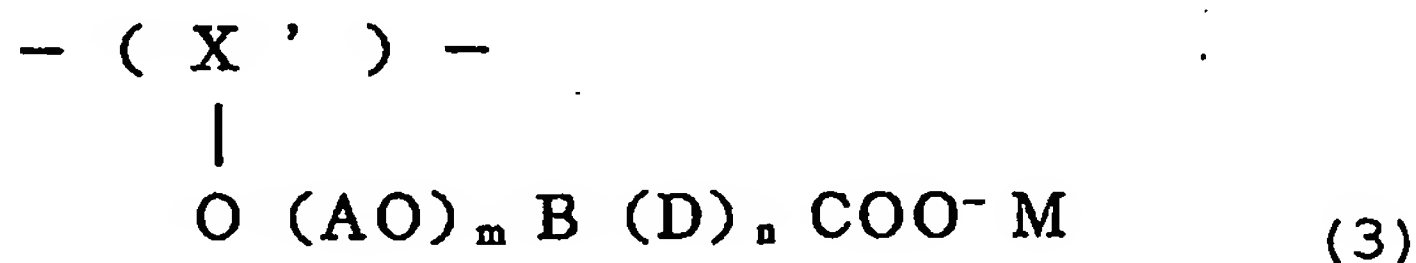
wherein X represents an alkenyl group; each A represents independently a linear or branched alkylene group of 1 to 15 carbon atoms which may be substituted; m represents an integer of 0 to 30; B represents a single bond or an alkylene group which may be substituted; each D represents independently an aromatic ring in which at least one hydrogen atom attached to the ring is replaced by a fluorine atom; n represents an integer of 1 to 10; and R represents a hydrogen atom, an alkyl group which may be substituted, or an aromatic ring which may be substituted.

3. A polymer compound comprising a polyalkenyl ether repeating unit comprising at least one selected from a carboxylic acid, a carboxylic acid ester and a carboxylic acid salt, each having a fluorine atom in a side chain thereof.

4. The polymer compound according to claim 3, which has a repeating unit represented by the general formula (2) or (3):



wherein X' represents a polyalkenyl group; each A represents independently a linear or branched alkylene group of 1 to 15 carbon atoms which may be substituted; m represents an integer of 0 to 30; B represents a single bond or an alkylene group which may be substituted; each D represents independently an aromatic ring in which at least one hydrogen atom attached to the ring is displaced by a fluorine atom; n represents an integer of 1 to 10; and R represents a hydrogen atom, an alkyl group which may be substituted, or an aromatic ring which may be substituted; or



wherein X' represents a polyalkenyl group; each A represents independently a linear or branched alkylene group of 1 to 15 carbon atoms which may be substituted; m represents an integer of 0 to 30; B represents a single bond or an alkylene group which may be substituted; each D represents independently an aromatic ring in which at least one hydrogen atom attached to the ring is displaced by a fluorine atom; n represents an integer of 1 to 10; and M represents a monovalent or polyvalent metal cation.

5. A block polymer comprising a polyalkenyl ether repeating unit comprising an aromatic structure having a fluorine atom in a side chain thereof in at least one block segment.

5 6. The block polymer according to claim 5, wherein the aromatic structure is at least one selected from a carboxylic acid, a carboxylic acid ester and a carboxylic acid salt.

7. The block polymer according to claim 5,
10 wherein the repeating unit is represented by the general formula (4):

$$-(X')-$$

$$|$$

$$O(AO)_m B(D)_n (COOR)_p \quad (4)$$

15 wherein X' represents a polyalkenyl group; each A represents independently a linear or branched alkylene group of 1 to 15 carbon atoms which may be substituted; m represents an integer of 0 to 30; B represents a single bond or an alkylene group which may be
20 substituted; each D represents independently an aromatic ring in which at least one hydrogen atom attached to the ring is displaced by a fluorine atom; n represents an integer of 1 to 10; p represents 0 or 1; and COOR represents a carboxylic acid ester, a
25 carboxylic acid, or a salt of a carboxylic acid anion and a cation.

8. The block polymer according to claim 5,

further comprising a hydrophilic block segment and a hydrophobic block segment.

9. A composition comprising a solvent or dispersing medium, a functional substance, and the
5 polymer compound set forth in claim 3 or the block polymer set forth in claim 5.

10. The composition according to claim 9, wherein the block polymer includes the functional substance.

11. The composition according to claim 10,
10 wherein the functional substance is a coloring material.

12. An image recording method comprising the steps of preparing the composition set forth in claim 11 and recording the composition on a medium.

13. An image recording apparatus comprising a
15 recording means for recording the composition set forth in claim 11 on a medium.